



Project BASTION „From Basic to Translational Research in Oncology”

Exchange of know-how and best practice through twinning (WP1)

Leader: Dominika Nowis

Deputy leader: Tomasz Stoklosa

Total estimated WP1 cost: 636 000 €



Objectives

- To foster increased scientific dialogue and twinning between MUW and eleven top research centres via secondments of scientific staff (experienced researchers) to transfer knowledge, new research methodologies and techniques, discuss research progress, share experimental data, work on joint research proposals and publications in top scientific journals
- 34 outgoing missions to partnering organisation laboratories (53,5 months in total)
- 31 incoming missions to MUW from partnering organisations (24,5 months in total)



Prof. Jakub Golab (MUW)
Prof William Gallagher (University College Dublin, Ireland)
Prof. Patrizia Agostinis (CULeuven, Belgium)

- **Project:** *Induction of systemic antitumour immunity by the combination of photodynamic therapy (PDT) and endoplasmic reticulum stress-inducing compounds*
- **From MUW:** 1 young researcher (1 visit in 2013 and 1 visit in 2014, 3 month each); 1 experienced researcher (1 visit in 2013 and 1 visit in 2015, 2 month each)
- **To MUW:** 1 experienced researcher and 1 young researcher (1 visit in 2013 and 1 visit in 2014, 1 month each)
- **Aim:** Identification and validation of candidate biomarkers of treatment response, with particular emphasis on translation of transcriptomic and proteomic datasets into clinically relevant assays.





Dr. Magdalena Winiarska (MUW)
Prof. Daniel Olive (Universite de la Mediterranee, Marseille, France)

- *Project: Application of anti-CD20 monoclonal antibody-mediated immunotherapy in cancer treatment*
- *From MUW: 1 experienced researcher (3-month visit in 2013 and 2-month visit in 2014)*
- *To MUW: 1 young researcher in 2014 and 2015, 1 month each*
- **Aim: Elucidation of resistance mechanisms in tumour cells that will allow to design diagnostic procedures aimed at identification of susceptible patient groups as well as development of therapeutic approaches increasing sensitivity of tumour cells to mAb treatment.**





Dr. Tomasz Stoklosa (MUW)
Prof. Lars Bullinger (University Hospital of Ulm, Germany)

- **Project:** *Investigation of the potential targets and markers of sensitivity to tyrosine kinase inhibitors in chronic lymphocytic leukaemia*
- **From MUW:** 1 experienced researcher (1 visit in 2013 and 1 visit in 2014, 2 month each)
- **To MUW:** 1 experienced researcher (1 visit in 2013 and 1 visit in 2014, 1 month each)
- **Aim:** **Characterisation of genes involved in CLL response to novel anticancer drugs and definition of group of patients who will mostly benefit from such treatments**





Prof. Zbigniew Gaciong (MUW)
**Prof. Cecilia Soderberg-Naucler (Karolinska Institutet,
Stockholm, Sweden)**

- ***Project:*** *Vascular mechanism of tumour dissemination*
- ***From MUW:*** 1 experienced researcher laboratory (1 visit in 2013 and 1 visit in 2014, 2 month each)
- ***To MUW:*** 1 experienced researcher (1 visit in 2013 and 1 visit in 2014, 1 month each)
- **Aim:** Development of novel diagnostic procedures based on identification of biomarkers associated with circulating tumour cells for personalized oncology.





Dr. Pawel Wlodarski (MUW)
**Prof. Jack Schalken (Radboud University Medical Center
Nijmegen, The Netherlands)**
Prof. Friedrich A. Grässer (Saarland University, Germany)

- ***Project:*** Study on inhibitors of metalloproteases (TIMPs) in prostate cancer
- ***From MUW:*** 1 young researcher (1 visit in 2013 and 1 visit in 2014, 1 month each); 1 experienced researcher (1 visit in 2013 and 1 visit in 2015, 1 month each)
- ***To MUW:*** 1 experienced researcher and 1 young researcher (1 visit in 2013 and 1 visit in 2014, 1 month each)
- **Objective:** As epigenetic regulation of TIMP gene expression may vary among patients, signature of these changes can be a predicting factor in prostate cancer.





Dr. Krystian Jazdzewski (MUW)

Dr. Stefano Volinia (University of Ferrara, Italy)

**Dr. Sean Lawler (Leeds Institute for Molecular Medicine,
University of Leeds, UK)**

- ***Project:*** *The role of microRNAs sequence variations in response to cancer treatment*
- ***From MUW:*** 1 young researcher (1 visit in 2013 and 1 visit in 2014, 1 month each); 1 experienced researcher (1 visit in 2013 and 1 visit in 2014, 1 month each)
- ***To MUW:*** 1 experienced researcher and 1 young researcher (1 visit in 2013 and 1 visit in 2014, 1 month each)
- **Aim:** Analysis of genetic background of an individual patient and identification of various factors implicated in clinical outcome of thyroid cancers that can be further used for tailoring of potential targeted therapies.





Dr. Piotr Religa (Karolinska Institutet and MUW)
Prof. Monica Nister (Karolinska Institutet, Stockholm, Sweden)

- **Project:** *Studies of circulating tumour cells in diagnostics of colon cancer*
- **From MUW:** 1 experienced researcher (1 visit in 2013 and 1 visit in 2014, 6 month each)
- **To MUW:** 1 experienced researcher (1 visit in 2013 and 1 visit in 2014, 1 month each)
- **Aim:** **Development of a technique for personalized detection of circulating tumor cells based on real time polymerase chain reaction**





Prof. Slawomir Majewski (MUW)
Prof. Herbert Pfister (University of Cologne, Germany)

- ***Project:*** *Molecular and genomic studies of HPV-associated carcinogenesis*
- ***From MUW:*** 1 experienced researcher (1 visit in 2013, 1 month)
- ***To MUW:*** 1 experienced researcher (1 visit in 2014, 1 month)
- **Aim:** Better understanding the role of HPVs in cutaneous oncogenesis and establishment of novel patient-based strategies in prevention and treatment of non-melanoma skin cancers.





Dr. Dominika Nowis (MUW)
Dr. Gaetano Vattemi (University of Verona, Italy)

- **Project:** *Targeting of proteostatic mechanisms with specific inhibitors of proteasome and protein folding in cancer and normal cells for patient-oriented, personalized and more effective cancer treatment*
- From MUW: 1 experienced researcher (1 visit in 2013 and 1 visit in 2014, 2 month each)
- To MUW: 1 experienced researcher (1 visit in 2013 and 1 visit in 2014, 1 month each)
- **Aim: Identification of blood-based or genomic biomarkers that will allow to either predict or diagnose toxicities associated with proteasome inhibitor treatment.**





Dr. Radoslaw Zagozdzon (MUW)
Prof. Bryan Hennessy (Royal College of Surgeons in Ireland)
Dr. Norma O'Donovan (Dublin City University)

Project: The role of peroxiredoxins in cancer biology and therapy

- From MUW: 2 experienced researchers from the Bioinformatics group to the twinning laboratory (2 x 2 weeks in 2014 and the same in 2015)
- To MUW: 1 experienced researcher to the MUW from the twinning laboratory (1 visit in 2014, 2 weeks, one visit in 2015 two weeks)





Members of the WUM research groups London Genetics Science Business Publishing

- 6 short (1-3 days) visits by London Genetics and Science Business at MUW (one from each institution each year)
- 6 short term visits to London Genetics and/or Science Business by MUW team members plus one 2 month internship by MUW employee at Science Business office in Brussels

